THERE IS CLAIMED:

1. A method of managing radio resources in an interactive telecommunication network which includes a plurality of terminals severally sharing the same available radio resource and is preferably of the type including at least one satellite, in which method communication services and resources allocated by said network to a given connected terminal for uplink and/or downlink transmission are managed as a function of the value for said terminal t_i of a product $\alpha^{(i)}$ of the type:

   $\alpha^{(i)}$ = bandwidth r_i x power p_i.

2. The method claimed in claim 1 wherein the bandwidth term r_i corresponds to the cumulative equivalent bandwidth of the connections of said terminal t_i, estimated at the time of accepting the call or connection concerned and the power term p_i corresponds to the average consumption of said terminal t_i, the value of p_i being determined periodically.

3. The method claimed in claim 1 wherein the allocation of communication services and resources to a connected terminal t_i is a function of the result of comparing the calculated value of the product $\alpha^{(i)}$, subject to a corresponding threshold value $\alpha_{\text{lim}}^{(i)}$ in the form of a maximum bandwidth r_i × power p_i product, with the quantity of radio resources reserved for accepting the connection, augmented by a supplementary margin for achieving the availability of service required or fixed for said terminal t_i.

4. The method claimed in claim 3 wherein said equivalent bandwidth r_i allocated to said terminal t_i is reduced by a factor $\alpha^{(i)} / \alpha_{\text{lim}}^{(i)}$ if said product $\alpha^{(i)}$ becomes greater than said product $\alpha_{\text{lim}}^{(i)}$.

5. The method claimed in claim 4 wherein, for a terminal t_i having a plurality of connections with different classes of service, the equivalent bandwidth reduction is shared between the various connections at random or in accordance with a predetermined hierarchical order.

6. The method claimed in claim 4 wherein a connection is cut off or cleared down if its equivalent bandwidth falls below a lower threshold value r_{min} corresponding to the minimum binary bit rate allocated to a terminal t_i for the connection concerned, for example.

7. The method claimed in claim 4 wherein, after the equivalent bandwidth r_i of a terminal t_i has been reduced beforehand, said equivalent bandwidth r_i is progressively returned to its normal value before reduction if said product $\alpha^{(i)}$ becomes less than said product $\alpha_{\text{lim}}^{(i)}$ again.

8. The method claimed in claim 1 wherein, for a given radio resource, such as a carrier, shared by a group G_i of several terminals t_i, the communication services and resources allocated by said network to said terminals t_i of said group G_i are managed globally as a function of a parameter α^{Ti} defined by the equation:
$$\alpha^{Tj} = \sum_{G(j)} r_i x p_i \, .$$

9. The method claimed in claim 8 wherein the equivalent bandwidth r_i of all said terminals t_i of said group G_j is reduced uniformly or in a differentiated manner or in a weighted manner if said parameter α^{Ti} exceeds a threshold value $\alpha_{\lim}^{(Tj)}$ corresponding to the capacity of the common radio resource shared by said terminals t_i of said group G_i.

10. The method claimed in claim 9 wherein said equivalent bandwidth r_i of all said terminals t_i of said group G_i is reduced by a factor $\alpha^{Tj} / \alpha_{\lim}^{(Tj)}$.

11. The method claimed in claim 9 wherein the equivalent bandwidth reduction is applied in a random or hierarchically predetermined manner to different terminals t_i of said group G_j in succession, said product α^{Ti} is calculated again after each reduction of said equivalent bandwidth r_i for a terminal t_i, and continued application of said equivalent bandwidth reduction to said group G_i is halted immediately the following condition is verified:
$\alpha^{Ti} \leq \alpha_{\lim}^{(Tj)}$.

12. The method claimed in claim 9 wherein, if the equivalent bandwidths r_i are reduced until they are equal to their respective minimum binary bit rates and the condition $\alpha^{Ti} \leq \alpha_{\lim}^{(Tj)}$ is still not verified, for all said terminals t_i of said group G_i, the terminals t_i to be disconnected from said network are chosen at random.

13. The method claimed in claim 8 wherein, in a cyclic process, said bandwidths r_i of said terminals t_i connected to said network via said at least one satellite are managed individually at a first stage and said terminals t_i of said groups G_j each associated with a shared radio resource are managed globally or in a grouped manner at a second stage.

14. The method claimed in claim 1 wherein said network is a code division multiple access satellite multimedia telecommunication network with automatic matching of the power transmitted from and to each terminal to the propagation conditions.

15. The method claimed in claim 1 wherein the uplink radio resource and downlink radio resource management processes are independent of each other except in the situation of disconnection of terminals t_i, the consequences of which are taken into

account in said two management processes.

16. The method claimed in claim 14 wherein said uplink radio resources are managed at a first stage and said downlink radio resources are managed at a second stage, or vice versa, taking into account disconnections resulting from the management process performed first, after which said management process performed first is performed again, taking into account any disconnections that have occurred during the management process performed second.
17. The method claimed in claim 14 wherein uplink radio resource management and downlink radio resource management are correlated, in particular by reducing the bandwidths r_i of a given terminal t_i in the same manner in both transmission directions.
18. An interactive satellite radiocommunication network providing communication channels and connections to a plurality of fixed or mobile terminals severally sharing the same radio resource made available by said network, wherein communication services and resources allocated to a given terminal t_i for uplink and/or downlink transmission are managed as a function of the value for said terminal t_i of a product $\alpha^{(i)}$ of the type:

    $\alpha^{(i)}$ = bandwidth r_i x power p_i.
19. The network claimed in claim 18 including means for providing gateways suitable for packet-based multimedia traffic between terminals in different service areas, a central network or a base, radio resource control means providing in particular a connection acceptance control function, a media access control function, and a power control function, and means for managing margins which adapt equivalent bandwidths continuously or in a stepwise manner during the existence of connections as a function of the corresponding calculated values $\alpha^{(i)}$ and α^{Ti}.
20. The network claimed in claim 18 further including at least one traffic supervisor adapted to redistribute the radio resources allocated to each downlink transmission communication gateway and a dedicated logical signaling interface for each terminal t_i for adapting equivalent bandwidths and transmitting corresponding information to said traffic supervisor means.
21. A fixed or mobile telecommunication terminal that is part of a network as claimed in claim 18 and which is adapted to implement a management method as claimed in claim 1.